

REMARKS

Claims 1 to 14 as set forth in the foregoing Listing of the Claims are herewith presented for further prosecution. As indicated therein, no Claims have been canceled, Claims 1 to 9 have been amended, and new Claims 10-14 have been added, relative to the previous version of the claims.

As more specifically addressed in the following Claims 1 to 9 have been revised for clarity and to delete references to preferred embodiments. The preferred embodiments previously reflected in Claims 2, 3, 4, 5 and 9 have been made the subject matter of new Claims 10 to 14, respectively. No new matter has been added, and favorable consideration is respectfully solicited.

The Abstract has been revised to eliminate legal phrascology, and withdrawal of the respective objection is respectfully solicited.

Figures 1 and 2 have been revised, and new Figures 2a and 2b have been added, to address objections raised in the Office action.

Figure 1 was objected to for failing to indicate that the respective column represented a prior art device. Applicants have revised Figure 1 accordingly, and withdrawal of the respective objection is respectfully solicited.

Figure 2 was objected to for failing to provide basis for column sections (a) through (h) and for certain cross-sectional areas. Accordingly, applicants have revised Figure 2 to include the section designation in addition to the numerals. Support for the respective clarifications is found in the application on page 10, indicated line 30, to page 11, indicated line 16. Additionally, applicants have introduced new Figures 2a and 2b which depict a cross-sectional view of the column at the positions depicted in Figure 2 as (a) - - - (a) and (b) - - - (b), respectively.

Figure 2 was further objected to for allegedly using the reference character "8" to designate both the middle region and the dividing wall. In fact, reference character "8" designates the middle region of the dividing wall, *see application page 11, indicated lines 16-18*. For clarification, applicants respectfully refer to the application, page 2, indicated lines 19-24, which

explains that the distillation column is divided by the dividing wall. As illustrated in Figure 2 and explained in the application on page 10, indicated lines 28-30, the dividing wall divides column sections b) and d) as well as column sections c) and e) from each other through its vertically extending upper and lower sections "7". The middle region of the dividing wall, designated as "8" extends obliquely between the upper and lower sections "7" and divides sections f) and g) from each other. Accordingly, both upper and lower sections indicated by reference character 7 and the middle section indicated by reference character 8 represent parts of the dividing wall and thus, altogether make up the dividing wall.

Further, the figures were objected to for failing to indicate the cross-sectional areas A_b to A_e . Applicants' new Figures 2a and 2b depict the respective areas. In light of the foregoing it is respectfully requested that the objections to the drawings be withdrawn. Favorable action is respectfully solicited.

Claims 1 to 9 were objected to for a number of informalities, all of which have been addressed by applicants' amendments:

- The improper reference to Figure 3 has been removed from Claim 5, and
- Claims 1, 5 and 9 have been revised to obviate any lack of proper antecedent basis issues.

Accordingly, it is respectfully requested that the objections to the drawings be withdrawn. Favorable action is respectfully solicited.

Claims 1 to 9 were rejected under 35 U.S.C. §112, ¶2, as being indefinite. For the reasons more specifically set forth in the following, the arguments in support of the rejection are deemed to be insufficient to support the conclusion of unpatentability, and/or the arguments cannot be deemed to be applicable to the claims.

The rejection asserts that Claim 6 is indefinite for referring to a "*bank-up principle*." Applicants respectfully note that the verb "to bank" is used in the English language inter alia in the sense of "to rise in or form a bank" and in this sense it is often used together with "up." As such, one having ordinary skill in the pertinent art will readily appreciate that the expression "*bank-up principle*" in the context of Claim 6 refers to a pre-distribution of the liquid in which the liquid is banked-up or accumulated. Applicants also respectfully submit that the original wording which was used in the German application upon which the present application relies for

priority, namely the expression “*Anstauprinzip*,” does not appear to have a single most fitting English language translation. The verb “*anstauen*” translates to “bank, pen up, stem,” and “dam (or pen) up” *see, e.g., the enclosed copies from English-German dictionaries*. Additionally, the English and German language abstracts of WO 2011/015352 and WO 2001/0666213, *copies enclosed*, illustrate that the German expression “*Anstau*” in the context of distillation technology is translated as “backup” as well as “accumulation,” respectively. On the one hand, the referenced material illustrates that one having ordinary skill in the art of distillation technology is well versed with the principle of liquid bank-up, backup or accumulation. On the other hand, the respective principle is referred to by a variety of expressions, all of which appear to be well understood in the pertinent art. The reference to a “*bank-up principle*” therefore is not deemed to render the subject matter of the claim indefinite within the meaning of Section 112, ¶2.

Claims 2-6 and 9 were rejected as being indefinite for referring to preferred ranges. Applicants’ amendment removes the respective ranges and, thus, obviates the issue.

Claims 6 and 9 were rejected as being indefinite for referring to a “*fine liquid distribution*” liquid distribution, and to “*isolating pure*” ethylhexyl p-methoxycinnamate. Applicants have revised Claim 6 to refer to a “*liquid fine distribution*.” The claim specifically sets forth that the respective liquid distribution is based on a capillary principle. Although the term “*fine*” may be a relative term, the term is used in conjunction with the reference to a liquid distribution based on capillary distribution and, as such, cannot be deemed to render the subject matter of Claim 6 indefinite to one having ordinary skill in the pertinent art. Claim 9 has been revised to refer to a “*purification*” of ethylhexyl p-methoxycinnamate and applicants’ amendment, thus, obviates the respective issue.

Last but not least, Claim 9 was rejected as being indefinite for failing to recite an active, positive step. Applicants’ amendment clarifies the respective step and, thus, obviates the issue.

At least for the foregoing reasons, it is respectfully requested that the rejection of Claims 1-9 under Section 112, ¶2, be withdrawn. Favorable action is solicited.

CONCLUSION

The foregoing shows that the subject matter of applicants' claims is patentable under the pertinent provisions of the statute, and that the claims are in good condition for allowance. In order to facilitate the resolution of any remaining issues or questions presented by this paper, applicants respectfully request that the Examiner directly contact the undersigned by phone to further the discussion. Favorable action is solicited

Respectfully submitted,
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Encls.: German-English Dictionary entries "*anstauen*" (2 pages)
Cover page of WO 2011/015352
Cover page of WO 2001/66213

Das heutige Übersetzungsstil sieht auf die können, die s' bewährt haben den letzten Jahrzehnt zu einem E

Dem Verfassungsgerichtswissenschaften zu schaffen, (Ansprüchen arsches Wörter und Techniken) ben. Der „Erl. Auswahl von Titeln der Technikschriften: the Grundlage (wie, gründe), geschickte Schwerpunktlinienentwicklungen (Bergbau, Hütte, Energietechnik, mit Daten- und Verkehrswissenschaften, Branchen der Leder, Holz, Papier, Lüstre) ergänzt, die internationale Arbeitswissenschaft wichtigsten Akribie geboten.

Die Arbeitsergebnisse und nationale dieser Gebiete sind sichtig. Die Arbeit von Verfasser u. führt.

Der Autor ist bei Gestaltung seiner Terminus so präzise, dass er die Fachordnungen „einzubringen“

- Band I Deutscher
- Band II Englisch
- Band III Deutsch
- Band IV Französisch
- Band V Deutsch
- Band VI Spanisch
- Band VII Deutsch
- Band VIII Portugiesisch
- Band IX Französisch
- Band X Englisch

anschwellen

anschwellen, sich bauen / bulk up \sim (Fahr) rise, swell \sim (n. swelling, bulging out) \sim (Blas) swelling of water \sim (Blas) / surge, brief rise in power \sim lassen (z.B. durch Auflassen) \sim , distend \sim lassen, ausbauen / bulk, bulk

anschwellender-Ankerdruck / intramucosal point \sim ~ Erweiterung of ore

Anschwelling (Electro.) / lump

anschwemmen (Flöß) / deposit \sim (Lack) / flashing process

Anschwemmen (Filter n) (Zylinder) / precoated filter \sim

~ leichter (Zylinder) / precoat

Anschwemmen (Flöß) / deposit, alternation \sim (Resin) / precoat

Anschwemmungen f (Flöß) / preparation conditions of

Anschwemmung, Schwemmung f (Flöß) / simulation of oscillations

Anschwingschleife f (Jöh) / starting transconductance

anschwören (Ges) / swear with oaths and lips

ansetzen, intr. Spitzenkraft ~ (Wan) / countermobilize it with

stimulus (Körperlichkeit) / counteract, countermeasure

ansetzung, verlängern / capable of being put on o.

adaptas

Ansetze-beleihen m (Chem) / batcheing tank \sim blatt a (Blitz)

/ F (F) / batcheing (Berg) / start

ansetzen, funktionieren spät / ~ ansetzen, ansetzen, verlängern / lengthen, add \sim verhindern, von \sim , an etwas befestigen / put on \sim (Gehirngang) /

arrange, put up \sim (Bachtunnel) / mark out \sim (Chart)

arrange, put up \sim (Gebiss) / prepare, make \sim / ~

Gleichung / arranging an equation \sim einer Mischung / compound preparation \sim von Kristallen / separation of crystals / den Zirkel \sim / set the compasses, / rectify, straighten \sim / fix, align, align, align, / horiz/ horizon \sim get interested in zur Landesvermessung \sim (Land) / prepare for approach, come in to land, [to water]

Ansetze, Lehnstein (Mang) / guide stone

Ansetzen, intr. (z.B. im Xanthum) / hard point

ANSI = American National Standards Institute

Ansicht f (sight, view) ~ halb von oben / semiplan view

\sim (sight, view) / on profile

Ansichtszeichnung f (Drawing) / plan of projection f

Ansichtszeichnung f (Drawing) / plan of projection f

Ansichtszeichnung f (Drawing) / projection \sim (Bas) /

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(12) NACH DEM VERTRÄG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES
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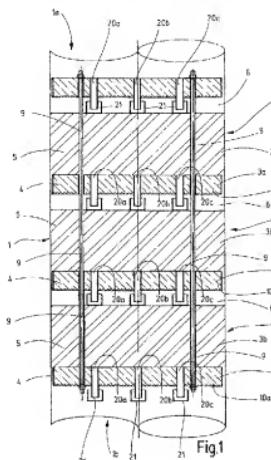
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(54) Titel: BACKUP COLUMN

(54) Bezeichnung : ANSTAKOLONNEN



(57) **Abstract:** The invention relates to a backup column for a heat and/or material exchange between a liquid phase and a flowing gaseous phase in the counter flow thereto, wherein the backup column (1) comprises at least two sections (2a-2c) with a first layer (3a) having a high specific surface and a lower throughput capacity and a second layer (3b) arranged on top with a lower specific surface and a higher throughput capacity. According to the invention, the first layer (3a) of the sections (2a-2c) of the backup column (1) is designed for forming a backup zone and thus a spotting bed with porous first filters (4) with a high specific surface and a low throughput capacity and the second layer (3b) of said sections (2a-2c) is designed for forming a separating zone for the liquid phase with porous second filters (5) comprising a lower specific surface and a higher throughput capacity compared to the first filters (4) of the first layer (3a).

(57) **Zusammenfassung:** Die Erfindung betrifft eine Anstakolonne für einen Wärme- und/oder Stoffaustausch zwischen einer flüssigen Phase und einer im Gegenstrom dazu strömenden gasförmigen Phase, wobei die Anstakolonne (1) mindestens zwei Sektionen (2a-2c) mit einer ersten Schicht (3a) mit einer hohen spezifischen Oberfläche und einer geringen Durchsatzkapazität und einer darüber liegenden zweiten Schicht (3b) mit einer niedrigeren spezifischen Oberfläche und einer höheren Durchsatzkapazität aufweist. Erfindungsgemäß ist vorgesehen, jeweils die erste Schicht (3a) der Sektionen

[Fortsetzung auf der nächsten Seite]

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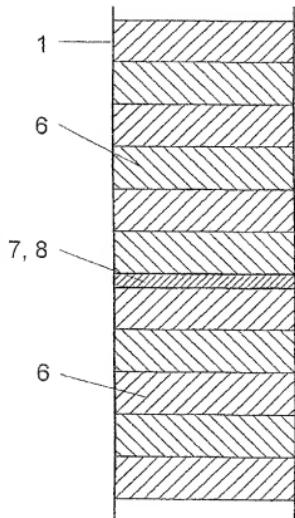
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(54) Title: LIQUID DISTRIBUTOR AND METHOD FOR OPERATING THE SAME

(54) Bezeichnung: FLÜSSIGKEITSVERTEILER UND VERFAHREN ZUM BETREIBEN



(57) **Abstract:** The invention relates to a liquid distributor for packed and/or filled columns, comprising individual, in particular horizontal layers involved in heat and/or material exchange. At least one layer of the column has a flooding, in particular for obtaining an increased density and for creating an accumulation of liquid and a specific surface for distributing the liquid. Said surface is greater than the surface of the overlying and underlying layers by a factor of 1.5 to 10, preferably by a factor of 2 to 3.

(57) **Zusammenfassung:** Die Erfindung betrifft eine Flüssigkeitsverteiler für Packungs- und/oder Füllkörperkolonnen mit einzelnen insbesondere horizontalen, am Wärme- und/oder Stoffaustausch beteiligen Schichten. Mindestens eine Schicht der Kolonne weist zur größeren Dichte und damit für einen Anstau insbesondere ein Fluten und für eine Verteilung der Flüssigkeit eine spezifische Oberfläche auf, die um den Faktor 1.5 bis 10, vorzugsweise um den Faktor 2 bis 3 größer ist als die Oberfläche der darüber und darunter liegenden Schicht.

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